

WHAT IS CLAIMED IS:

1. A reproducing/recording apparatus comprising a first reproducing/recording mechanism for reproducing data from and/or recording data onto a cartridge/disk combination, a disk main body being contained in the cartridge;

5 the first reproducing/recording mechanism having a traversing mechanism disposed oppositely relative to the recording area of said cartridge/disk combination and a clamping mechanism disposed oppositely relative to the traversing mechanism with the cartridge/disk combination interposed between them, the clamping mechanism having a keep member adapted to urge said cartridge/disk combination toward the side of the
10 traversing mechanism at the time of clamping said cartridge/disk combination.

2. The reproducing/recording apparatus according to claim 1, wherein said first reproducing/recording mechanism is adapted to reproduce data from and/or record data onto a cartridge/disk combination, of which the disk main body is contained in the cartridge, or a bare disk; and

15 said first reproducing/recording mechanism has the traversing mechanism disposed oppositely relative to the recording area of said cartridge/disk combination or a bare disk and the clamping mechanism disposed oppositely relative to the traversing mechanism with the cartridge/disk combination or the bare disk interposed between them, the clamping mechanism having the keep member adapted to urge said cartridge/disk
20 combination toward the side of the traversing mechanism at the time of clamping said cartridge/disk combination.

3. The reproducing/recording apparatus according to claim 1, wherein said first reproducing/recording mechanism is arranged at the side of the disk inlet/outlet port and a second reproducing/recording mechanism for reproducing data from
25 and/or recording data onto a bare disk is arranged remotely from the disk inlet/outlet port with the first reproducing/recording mechanism interposed between them.

4. The reproducing/recording apparatus according to claim 3, wherein said clamping mechanism has a holding section for holding the disk and a back and forth moving mechanism adapted to move the holding section toward and away from

a first disk tray carrying said cartridge/disk combination mounted thereon and the back and forth moving mechanism is arranged in such a way that the distance by which the holding section is separated from the first disk tray is sufficiently large to allow the second disk tray mounted by the bare disk to move between the disk inlet/outlet port and the second reproducing/recording mechanism.

5 5. The reproducing/recording apparatus according to claim 4, wherein said first disk tray being adapted to be moved into and away from the apparatus through a single disk inlet/outlet port with the second disk tray laid thereon.

6. The reproducing/recording apparatus according to claim 5 wherein
10 said cartridge disk is a disk adapted to be used with a blue laser beam for reproducing/recording of data and said bare disk is a disk adapted to be used with a red laser beam or a blue laser beam for reproducing/recording of data.

7 An apparatus according to claim 5, further comprising
15 a locking mechanism for locking the first disk tray and the second disk tray laid on the first disk tray together.

8. The reproducing/recording apparatus according to claim 7, wherein
20 said locking mechanism has a resilient detent member arranged on the first disk tray and provided at the front end thereof with an engaging projection and an engaging hole cut through the second disk tray and adapted to be engaged with the corresponding engaging projection.

9. The reproducing/recording apparatus according to claim 8, wherein
 said resilient detent member is adapted to align the cartridge disk.

10. The reproducing/recording apparatus according to claim 4, further comprising:

25 a second tray driving mechanism to be used for driving the second disk tray to move to the side of the disk inlet/outlet port and a first tray driving mechanism to be used for driving the first disk tray in a state of carrying thereon the second disk tray to move to the side of the disk inlet/outlet port, said first tray driving mechanism having a drive source, a first gear unit linked to the drive source and a first tray rack held in engagement

with the first gear unit and arranged at the first disk tray, said second tray driving mechanism having a drive source, a second gear unit linked to the drive source and a second tray rack held in engagement with the second gear unit and arranged at the second disk tray, said second gear unit having a loosing mechanism to be used for separating the drive force of the second tray rack from the second gear unit without load when moving the first disk tray to the disk inlet/outlet port with the second disk tray laid thereon.

11. The reproducing/recording apparatus according to claim 10, wherein said loosing mechanism has a base gear, an idle gear arranged coaxially with the base gear so as to be rotatable relative to the base gear and a biasing member for biasing the idle gear in the sense of rotation of the base gear when moving the second disk tray toward the disk inlet/outlet port.

12. The reproducing/recording apparatus according to claim 3, further comprising:

a 4-position shifting mechanism to be used for shifting the position of each of the first reproducing/recording mechanism and the second reproducing/recording mechanism to one of the predetermined four positions,

said 4-position shifting mechanism having a drive source, a pinion linked to the drive source, a first rack to be engaged with the pinion, a first cam mechanism linking the first rack and the second reproducing/recording mechanism and driving said second reproducing/recording mechanism to move between the first position and the second position in response to the movement of the first rack, a second rack to be engaged with the pinion, a second cam mechanism linking the second rack and the first reproducing/recording mechanism and driving said first reproducing/recording mechanism to move between a first position and a second position in response to the movement of the second rack, a third rack to be engaged with said pinion and arranged oppositely relative to said first rack with said pinion interposed between them, a third cam mechanism linking the third rack and the second reproducing/recording mechanism and driving said second reproducing/recording mechanism to move between the second position and the first position in response to the movement of the third rack, a first switching mechanism for

switching the engagement of the first rack and the pinion to the engagement of the second rack and the pinion and a second switching mechanism for switching the engagement of the second rack and the pinion to the engagement of the third rack and the pinion.